

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A mobile crane apparatus, comprising:

a trailer having a frame supported for road travel on only a single axle that mounts a wheel on each opposite end of said axle, said trailer having a substantially rectangular trailer platform carried on said frame;

a hydraulically operated crane having a center post and a boom, said center post supported at a fixed position on said trailer to extend upwardly from a central location of said trailer platform, said central location substantially centrally located both longitudinally and laterally of said trailer platform, and said boom being telescopically extendable outwardly from said center post, said boom extendable to a reach of at least about 16 feet,

said trailer and said crane configured to have a weight of about 5000 ~~6000~~ pounds and a lifting capacity of at least about 1200 pounds at a reach of about 16 feet;

said center post rotatable about a vertical axis to position said boom, said center post located between said wheels centered on a longitudinal position that is between a longitudinal front edge of said wheels and a longitudinal rear edge of said wheels ~~substantially vertically aligned with said axle~~;

an attachment located at a free end of said boom for connecting a lifting line; and

a crane operator control station carried by said trailer, said control station fixed in position on said trailer independent of said center post such that rotation

of said center post does not move said operator control station, said operator control station facing a lateral side of said trailer.

2. (Previously Amended) The crane apparatus according to claim 1, further comprising a vibratory driver suspended from said free end of said crane via said attachment and arranged and configured to grasp and then drive a piling sheet into the ground.

3. (Original) The crane apparatus according to claim 1 wherein said wheels comprise tires having a width of about 16 inches.

4. (Original) The crane apparatus according to claim 1, comprising a crane hydraulic power unit and an accessory hydraulic power unit carried by said trailer.

5. (Original) The crane apparatus according to claim 1, further comprising a sheet piling driver suspended from said crane.

6. (Previously Amended) The crane apparatus according to claim 1, wherein said crane operator control station comprises a control panel having said controls for operating said crane, and a seat mounted to said trailer for supporting an operator at said control panel.

7. (Previously Amended) The crane apparatus according to claim 1, comprising a hydraulic power unit having said controls, and a seat supported on said trailer and located for an operator to manually control said controls.

8. (Original). The crane apparatus according to claim 6, wherein said seat is arranged facing in a direction perpendicular to a longitudinal axis of said trailer.

9. (Currently Amended) The crane apparatus according to claim 1, ~~further~~ comprising outriggers arranged at respective back corners of said trailer and deployable to support the back corners of said trailer from the ground.

10. (Original) The crane apparatus according to claim 9, wherein said outriggers are hydraulically deployable.

11. (Currently Amended) A trailer-mounted crane apparatus, comprising:

a compact trailer having a frame supported from a ground surface on at least two wheels having a common axis of rotation, said trailer having a substantially rectangular trailer platform carried by said frame, said frame configured to be towed from its front end;

a hydraulically operated crane arm ~~extendable from~~ and a post, said post mounted to said trailer at a fixed position to extend upwardly from a

central location of said trailer platform, said central location substantially centrally located both longitudinally and laterally of said trailer platform, said post mounted to said trailer ~~at a position~~ centered on a longitudinal position that is between a longitudinal front edge of said wheels and a longitudinal rear edge of said wheels, said crane arm mounted to, and extendable from, said post substantially vertically aligned with said common axis of rotation of said wheels;

a hydraulic crane power unit mounted to said trailer for supplying pressurized hydraulic fluid to said crane arm;

a control panel carrying controls for said hydraulic power unit, said control panel mounted on said trailer independent of movement of said post, said control panel mounted longitudinally in front of said post and facing laterally; and

an operator seat supported from said trailer and located outside said frame, and said seat independent of movement of said post and arranged to face said control panel.

12. (Previously Amended) The trailer-mounted crane apparatus according to claim 11, further comprising a vibratory sheet pile driver suspended from said crane arm, and said trailer-mounted crane apparatus further comprises a hydraulic driver power unit for driving said vibratory sheet pile driver mounted on said trailer, wherein said control panel includes controls for said hydraulic driver power unit, an operator on said seat capable of reaching said controls for said hydraulic crane power unit and for said hydraulic driver power unit.

13. (Previously Amended) The trailer-mounted crane apparatus according to claim 12, comprising a longitudinally extended hydraulic cylinder mounted longitudinally along said trailer, said hydraulic cylinder operatively connected to said post to rotate said post.

14. (Currently Amended) The trailer-mounted crane apparatus according to claim 13, wherein said hydraulic crane power unit is mounted on said trailer in front of said post, and said control panel and said operator seat are mounted in front of said hydraulic crane power unit and laterally of said post, ~~and said hydraulic crane power unit is mounted in front of said post.~~

15. (Currently Amended) A trailer-mounted crane apparatus,
comprising:

a compact trailer having a frame supported from a ground surface
on at least two wheels having a common axis of rotation, said trailer having a
substantially rectangular trailer platform carried by said frame;

a hydraulically operated crane arm and a post, said post mounted
to said trailer at a fixed position to extend upwardly from a central location of said
trailer platform, said central location substantially centrally located both
longitudinally and laterally of said trailer platform, said post mounted to said
trailer centered on a longitudinal position that is between a longitudinal front edge
of said wheels and a longitudinal rear edge of said wheels, said crane arm
mounted to, and extendable from, said post;

a hydraulic crane power unit mounted to said trailer for supplying
pressurized hydraulic fluid to said crane arm;

a control panel carrying controls for said hydraulic power unit, said
control panel mounted on said trailer independent of movement of said post,

an operator seat supported from said trailer independent of
movement of said post and arranged to face said control panel;

a vibratory sheet pile driver suspended from said crane arm;

a hydraulic driver power unit for driving said vibratory sheet pile
driver mounted on said trailer, wherein said control panel includes controls for
said hydraulic driver power unit, an operator on said seat capable of reaching
said controls for said hydraulic crane power unit and for said hydraulic driver
power unit;

a longitudinally extended hydraulic cylinder mounted longitudinally
along said trailer, said hydraulic cylinder operatively connected to said post to
rotate said post;

wherein said hydraulic crane power unit is mounted on said trailer
in front of said post, and said control panel and said operator seat are mounted in
front of said hydraulic crane power unit and laterally of said post, and said
hydraulic crane power unit is mounted in front of said post; and

~~The trailer-mounted crane apparatus according to claim 14, further comprising a sheet pile driver retainer extending rearwardly of said trailer, and mounted to said trailer.~~

16. (Currently Amended) A trailer-mounted crane apparatus,
comprising:
- a compact trailer having a frame supported from a ground surface on at least two wheels having a common axis of rotation, said trailer having a substantially rectangular trailer platform carried by said frame;
 - a hydraulically operated crane arm and a post, said post mounted to said trailer at a fixed position to extend upwardly from a central location of said trailer platform, said central location substantially centrally located both longitudinally and laterally of said trailer platform, said post mounted to said trailer centered on a longitudinal position that is between a longitudinal front edge of said wheels and a longitudinal rear edge of said wheels, said crane arm mounted to, and extendable from, said post;
 - a hydraulic crane power unit mounted to said trailer for supplying pressurized hydraulic fluid to said crane arm;
 - a control panel carrying controls for said hydraulic power unit, said control panel mounted on said trailer independent of movement of said post,
 - an operator seat supported from said trailer independent of movement of said post and arranged to face said control panel;
 - a vibratory sheet pile driver suspended from said crane arm;

a hydraulic driver power unit for driving said vibratory sheet pile driver mounted on said trailer, wherein said control panel includes controls for said hydraulic driver power unit, an operator on said seat capable of reaching said controls for said hydraulic crane power unit and for said hydraulic driver power unit;

a longitudinally extended hydraulic cylinder mounted longitudinally along said trailer, said hydraulic cylinder operatively connected to said post to rotate said post;

wherein said hydraulic crane power unit is mounted on said trailer in front of said post, and said control panel and said operator seat are mounted in front of said hydraulic crane power unit and laterally of said post, and said hydraulic crane power unit is mounted in front of said post; and

~~The trailer-mounted crane apparatus according to claim 14, further comprising~~ a sheet pile driver cradle mounted to said trailer on a side of said ~~crane post~~ opposite to said operator's seat.

17. (Currently Amended) A mobile crane apparatus, comprising:

a trailer having a frame that mounts a single axle, said frame supported by at least one pair of road transportation wheels mounted on said axle, said trailer having a substantially rectangular platform supported by said frame, said frame having a hitch attachment on a front thereof; and

a hydraulically operated crane having a center post and a boom, said center post supported to extend upwardly from a central location of said

trailer platform, said central location substantially centrally located both longitudinally and laterally of said platform, and said boom telescopically extendable outwardly from said center post, said center post being located substantially equidistant between said wheels; and

said trailer and said crane configured to have a weight of about 5000 pounds and a lifting capacity of at least about 1200 pounds at a reach of about 16 feet.

18. (Currently Amended) The mobile crane apparatus according to claim 17, further comprising a vibratory sheet pile driver suspended from said boom, and said mobile crane apparatus ~~further~~ comprises a hydraulic driver power unit for driving said vibratory sheet pile driver, carried on said trailer.

19. (Previously Amended) The mobile crane apparatus according to claim 17 wherein said hydraulically operated crane comprises an elongated hydraulic cylinder extending longitudinally along said trailer, said elongated cylinder fastened to said trailer, and said center post is carried by said elongated cylinder, said elongated cylinder operatively connected to said post to selectively rotate said post by hydraulic fluid pressure.

20. (Currently Amended) The mobile crane apparatus according to claim 18, ~~further~~ comprising:

a control panel for said hydraulic driver power unit fixedly mounted on said trailer;

an operator seat fixedly mounted to said trailer and arranged to face said control panel;

a hydraulic crane power unit for supplying pressurized hydraulic fluid to said crane,

wherein said hydraulic driver power unit is mounted on said trailer in front of said crane center post, and said control panel and said operator seat are mounted on said trailer in front of said hydraulic crane power unit and laterally of said crane center post, and said hydraulic driver power unit is mounted on said trailer in front of said crane center post.

21. (Previously Added) The mobile crane apparatus according to claim 17, wherein said hydraulically operated crane comprises about 50% of the total weight of said mobile crane apparatus.

22. (Cancelled)

23. (Cancelled)

24. (Previously Amended) The mobile crane apparatus according to claim 17, wherein said wheels comprise tires having a width of about 16 inches.

25. (Cancelled)

26. (Currently Amended) The mobile crane apparatus according to claim 17, wherein:

said apparatus ~~further~~ comprises four outriggers coupled to said platform, each outrigger located adjacent to a respective one of said four corners of the platform, said outriggers deployable to support said platform from grade at said four corners, said center post being located substantially equidistant to each outrigger.

27. (Currently Amended) A compact mobile crane apparatus comprising:

a compact trailer having a single axle, at least one pair of road transportation wheels mounted on opposite sides of said axle, and a towing hitch on a front end of said trailer ~~thereof~~, during road transportation said trailer supported only ~~on at least one pair of road transportation wheels mounted on~~ by said axle and said towing hitch; ~~and~~

a hydraulically operated crane having a center post and a telescopically extendable boom, said center post supported at a fixed position on said trailer to extend upwardly, and said boom extendable outwardly from said fixed position of said center post, said center post being located substantially equidistant from said wheels centered on a longitudinal position that is between a

longitudinal front edge of said wheels and a longitudinal rear edge of said wheels
vertically aligned with said axle; and

an attachment located at a free end of said boom for connecting a
lifting line, said crane apparatus configured to have a weight of about 5000
pounds, a lifting capacity of at least about 1200 pounds and said crane having a
reach of about 16 feet.

28. (Currently Amended) The compact mobile crane apparatus
according to claim 27, wherein:

said trailer comprises a substantially rectangular framework having
four corners; and

said apparatus ~~further~~ comprises four outriggers coupled to said
framework, each outrigger located adjacent to a respective one of four corners of
the framework, said outriggers deployable to support said framework from grade
at said four corners, said center post being located substantially equidistant to
each outrigger.

29. (Currently Amended) The compact mobile crane apparatus
according to claim 27, further comprising a vibratory sheet pile driver suspended
from said boom, and said mobile crane apparatus ~~further~~ comprises a hydraulic
driver power unit mounted on said trailer for driving said vibratory sheet pile
driver.

30. (Currently Amended) The compact mobile crane apparatus according to claim 29, further comprising:

a control panel for said hydraulic driver power unit fixedly mounted on said trailer;

an operator seat fixedly mounted to said trailer and arranged to face said control panel;

a hydraulic crane power unit for supplying pressurized hydraulic fluid to said crane,

wherein said hydraulic driver power unit is mounted on said trailer in front of said crane center post, and said control panel and said operator seat are mounted on said trailer in front of said hydraulic crane power unit and laterally of said crane center post, ~~and said hydraulic driver power unit is mounted on said trailer in front of said crane center post.~~

31. (Previously Added) The compact mobile crane apparatus according to claim 30, wherein said hydraulically operated crane comprises about 50% of the total weight of said mobile crane apparatus.

32. (Previously Amended) The compact mobile crane apparatus according to claim 27 wherein said hydraulically operated crane comprises an elongated hydraulic cylinder extending longitudinally along said trailer, said elongated hydraulic cylinder fastened to said trailer, and said center post is carried by said elongated hydraulic cylinder, said hydraulic cylinder being

operatively connected to said center post to rotate said center post by application of hydraulic fluid pressure within said hydraulic cylinder.

33. (Currently Amended) A compact, self-contained crane and vibratory sheet piling apparatus, comprising:

a compact trailer, being configured to be towed for road transport, said trailer having a frame supported from a ground surface on at least two wheels, said frame including a hitch for being towed;

a crane post and a hydraulically operated crane arm extendable from said post, said post mounted to said frame to extend upwardly from said trailer;

a hydraulic crane power unit for supplying pressurized hydraulic fluid to said crane arm, said hydraulic crane power unit mounted on said frame;

a vibratory sheet pile driver suspended from said crane arm;

a hydraulic driver power unit for supplying pressurized hydraulic fluid for driving said vibratory sheet pile driver, said hydraulic driver power unit mounted on said frame, as a permanent on-board component, adding to the operational weight of the compact trailer;

a control station mounted on said trailer, said control station mounted independent of movement of said post, and said control station including controls for said hydraulic crane power unit and said hydraulic driver power unit, wherein an operator at said station is capable of reaching said controls for said hydraulic crane power unit and for said hydraulic driver power

unit, the operator capable of controlling both said crane arm movement and said vibratory sheet pile driver from said station.

34. (Previously Added) The compact, self-contained crane and vibratory sheet piling apparatus according to claim 33, wherein said control station comprises an operator seat supported from said trailer independent of movement of said post and arranged to face said control station.

35. (Currently Amended) The compact, self-contained crane and vibratory sheet piling apparatus according to claim 33, wherein said trailer comprises a single axle trailer, said at least two wheels having a common axis of rotation aligned with said single axle, and said post is mounted to said trailer at a position centered on a longitudinal position that is between a longitudinal front edge of said wheels and a longitudinal rear edge of said wheels ~~substantially vertically aligned with said common axis of rotation.~~

36. (New) The compact, self-contained crane and vibratory sheet piling apparatus according to claim 33, comprising a retainer mounted on said frame for retaining said vibratory sheet pile driver during road transport of said apparatus.

37. (New) The compact, self-contained crane and vibratory sheet piling apparatus according to claim 33, wherein said apparatus has a weight of about 6000 pounds.